

IN THE CLAIMS:

Delete claims 8 - 24.

Add claims 25 - 30.

25. (New) A method of forming a damascene structure, comprising:

providing a substrate;

forming a dielectric layer over the substrate;

patterning the dielectric layer to form an opening that exposes a portion of the substrate;

forming a metallic layer over the substrate so that the opening is completely filled;

performing chemical-mechanical polishing to remove a portion of the metallic layer; and

treating the substrate using an aqueous solution of ozone so that contaminants on a surface of the substrate are removed.

26. (New) The method of claim 25, wherein a concentration of ozone in the aqueous solution is between about 10 ppm and 200 ppm.

27. (New) The method of claim 25, wherein step of treating the substrate is performed by a first buffer-polishing process.

28. (New) The method of claim 25, wherein the step of treating the substrate is performed by a water-cleaning process.

29. (New) The method of claim 28, wherein the water-cleaning step includes providing an inertial mechanical force of between about 0.5 psi and 3 psi.

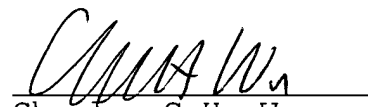
30. (New) The method of claim 28, further includes:

forming a barrier layer over the substrate, wherein the barrier layer is conformal to the surface profile of the substrate and covers the dielectric layer before forming a metallic layer process but after patterning the dielectric layer process; and

performing barrier layer chemical-mechanical polishing to remove a portion of the barrier layer and expose the dielectric layer after performing chemical-mechanical polishing process.

Dated: June 23, 2003

Respectfully submitted,


Charles C.H. Wu
Reg. No. 39,081
Attorney for Applicant

WU & CHEUNG, L.L.P.
7700 Irvine Center Drive, Suite 710
Irvine, California 92618-3043
Tel: (949) 251-0111
Fax: (949) 251-1588
E-MAIL: CCHWU @ EARTHLINK.NET
USPTO CUSTOMER NO.: 25864

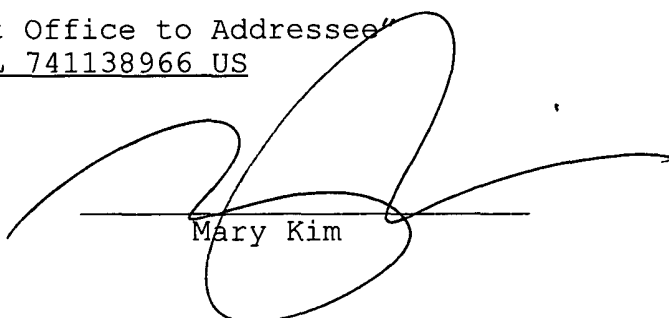
CERTIFICATE OF MAILING

I hereby certify that this paper or fee (along with any paper referred to as being attached or enclosed) is being deposited on the date shown below with the United States Postal Service in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ 37 CFR 1.8(a)
with sufficient postage as First Class Mail.

☒ 37 CFR 1.10
as "Express Mail Post Office to Addressee"
Mailing label no.: EL 741138966 US

Date: June 23, 2003



Mary Kim